



中华人民共和国国家知识产权局

邮政编码: 100037 中国北京阜成门外大街 2 号 8 层 中国国际贸易促进委员会专利商标事务所 龙传红		 审查员签章	 专利审查业务章 查业备专05章
申请号	00106723.0	部门及通知书类型	9-C
申请人	住友特殊金属株式会社		
发明名称	稀土金属基永磁体及其生产工艺		

第一次审查意见通知书

1. ☒ 依申请人提出的实审请求, 根据专利法第 35 条第 1 款的规定, 审查员对上述发明专利申请进行实质审查。

☐ 根据专利法第 35 条第 2 款的规定, 国家知识产权局决定自行对上述发明专利申请进行审查。

2. ☒ 申请人要求以在:

_____ 日本 _____ 专利局的申请日 1999 年 01 月 27 日为优先权日,
 _____ 日本 _____ 专利局的申请日 1999 年 04 月 23 日为优先权日,
 _____ 日本 _____ 专利局的申请日 1999 年 04 月 23 日为优先权日,
 _____ 日本 _____ 专利局的申请日 2000 年 01 月 11 日为优先权日,

☒ 申请人已经提交了经原申请国受理机关证明的第一次提出的在先申请文件的副本。

☐ 申请人尚未提交经原申请国受理机关证明的第一次提出的在先申请文件的副本, 根据专利法第 30 条的规定视为未提出优先权要求。

3. ☐ 申请人于 _____ 年 _____ 月 _____ 日和 _____ 年 _____ 月 _____ 日提交了修改文件。

经审查, 其中: _____ 年 _____ 月 _____ 日提交的 _____ 不能被接受;

_____ 年 _____ 月 _____ 日提交的 _____ 不能被接受;

因为上述修改 ☐ 不符合专利法第 33 条的规定。 ☐ 不符合实施细则第 51 条的规定。

修改不能被接受的具体理由见通知书正文部分。

4. ☒ 审查是针对原始申请文件进行的。

☐ 审查是针对下述申请文件的:

申请日提交的原始申请文件的权利要求第 _____ 项、说明书第 _____ 页、附图第 _____ 页;

_____ 年 _____ 月 _____ 日提交的权利要求第 _____ 项、说明书第 _____ 页、附图第 _____ 页;

_____ 年 _____ 月 _____ 日提交的权利要求第 _____ 项、说明书第 _____ 页、附图第 _____ 页;

_____ 年 _____ 月 _____ 日提交的权利要求第 _____ 项、说明书第 _____ 页、附图第 _____ 页;

_____ 年 _____ 月 _____ 日提交的说明书摘要, _____ 年 _____ 月 _____ 日提交的摘要附图。

5. ☐ 本通知书是在未进行检索的情况下作出的。

☒ 本通知书是在进行了检索的情况下作出的。

☒ 本通知书引用下述对比文献(其编号在今后的审查过程中继续沿用):

2201 2001.7 回函请寄: 100088 北京市海淀区蓟门桥西土城路 6 号 国家知识产权局专利局受理处收
 (注: 凡寄给审查员个人的信函不具有法律效力)

编号	文件号或名称	公开日期
1	JP11-3811A	1999 年 01 月 06 日
2	US5302464A	1994 年 04 月 12 日
3		年 月 日
4		年 月 日

6. 审查的结论性意见:

☒关于说明书:

☐申请的内容属于专利法第 5 条规定的不予授予专利权的范围。

☐说明书不符合专利法第 26 条第 3 款的规定。

☒说明书的撰写不符合实施细则第 18 条的规定。

☐

☒关于权利要求书:

☒权利要求 1, 2, 5-8, 13, 14, 17, 18 不具备专利法第 22 条第 2 款规定的新颖性。

☒权利要求 3, 4, 9-12, 19, 20 不具备专利法第 22 条第 3 款规定的创造性。

☐权利要求 不具备专利法第 22 条第 4 款规定的实用性。

☐权利要求 属于专利法第 25 条规定的不予授予专利权的范围。

☐权利要求 不符合专利法第 26 条第 4 款的规定。

☐权利要求 不符合专利法第 31 条第 1 款的规定。

☐权利要求 不符合专利法实施细则第 2 条第 1 款关于发明的定义。

☐权利要求 不符合专利法实施细则第 13 条第 1 款的规定。

☒权利要求 1-3, 8, 9, 13, 16-20 不符合专利法实施细则第 20 条至第 23 条的规定。

☐

上述结论性意见的具体分析见本通知书的正文部分。

7. 基于上述结论性意见, 审查员认为:

☐申请人应按照通知书正文部分提出的要求, 对申请文件进行修改。

☒申请人应在意见陈述书中论述其专利申请可以被授予专利权的理由, 并对通知书正文部分中指出的不符合规定之处进行修改, 否则将不能授予专利权。

☐专利申请中没有可以被授予专利权的实质性内容, 如果申请人没有陈述理由或者陈述理由不充分, 其申请将被驳回。

☐

8. 申请人应注意下述事项:

(1) 根据专利法第 37 条的规定, 申请人应在收到本通知书之日起的肆个月内陈述意见, 如果申请人无正当理由逾期不答复, 其申请将被视为撤回。

(2) 申请人对其申请的修改应符合专利法第 33 条的规定, 修改文本应一式两份, 其格式应符合审查指南的有关规定。

(3) 申请人的意见陈述书和/或修改文本应邮寄或递交国家知识产权局专利局受理处, 凡未邮寄或递交给受理处的文件不具备法律效力。

(4) 未经预约, 申请人和/或代理人不得前来国家知识产权局专利局与审查员举行会晤。

9. 本通知书正文部分共有 4 页, 并附有下列附件:

☒引用的对比文件的复印件共 2 份 25 页。

☐

审查 9 部

审查员

审查部门业务专用章

(未加盖审查业务专用章的通知书不具备法律效力)

第一次审查意见通知书正文

本申请（申请号：00106723.0）涉及稀土金属基永磁体及其制造方法。应申请人的请求，审查员对本专利申请进行了实质审查，具体审查意见如下：

1、权利要求 1-3、8、9、13、16、17 不清楚

独立权利要求 1 请求保护的是一种具有薄膜层的稀土金属基永磁体，该权利要求是不清楚的，因为，“基本上”是含义不确定的词语，本领域里技术人员也不清楚“仅由直接在形成磁体的金属表面上的细金属粉末构成”的含义，该权利要求不清楚。

从属权利要求 2、3 中的均出现了起说明作用的括号，如“铜（Cu）”，使该权利要求不清楚。

从属权利要求 8、9 中的“所说磁体表面上的树脂部分”，在被引用的权利要求中并没有述及到，这是不清楚的。

独立权利要求 13 请求保护的是一种生产稀土金属基永磁体的工艺，本领域的技术人员不清楚“在形成所说的磁体表面的金属上形成由细金属粉末生产材料形成的细金属粉末组成的薄膜层”的含义，这个权利要求不清楚。

从属权利要求 16 中的“细金属粉末生产材料是针状和/或柱状的，其长直径为 0.05mm-10mm”是不清楚的，柱状体不可能具有长直径，该权利要求是不清楚的。

独立权利要求 17 的主题名称是“具有由在形成磁体表面的金属上的细金属粉末组成的薄膜层的稀土金属基永磁体”，本领域技术人员不清楚它的含义，该权利要求不清楚。

权利要求 1-3、8、9、13、16、17 没有清楚地表述请求保护的范围，不符合专利法实施细则第二十条第一款的有关规定。

2、权利要求 1-20 没有新颖性和/或创造性

前面已经评述了权利要求书不清楚，即使申请人将权利要求书修改清楚，权利要求也没有新颖性和/或创造性。

独立权利要求 1 请求保护的是一种具有薄膜层的稀土金属基永磁体，对比文件 1（JP11-3811A）（参见说明书全文，特别是第 2 栏第 29 行-第 6 栏第 30 行，附图 2、3）公开了一种具有薄膜层的稀土类粘结磁体，该磁体的薄膜层是仅由金属粉末附着在粘结磁体的表面所组成，并在金属粉末薄膜层的表面形成镀膜。权利要求 1 与对比文件 1 的技术领域相同，所要解决的技术问题相同，技术方案实质相同，预期效果也相同。因此，相对于对比文件 1，权利要求 1 不具有专利法第二十二条第二款规定的新颖性。

从属权利要求 2 进一步限定的技术特征是，细金属粉末至少含有下列一种金属组分：铜、铁、钴、镍、铬。对比文件 1 公开了细金属粉末为镍，在引用的权利要求没有新颖性的前提下，权利要求 2 不具有专利法第二十二条第二款规定的新颖性。

从属权利要求 3 进一步限定的技术特征是，细金属粉末是细铜粉末；从属权利要求 4 进一步限定的技术特征是，细金属粉末的维氏硬度为 60 或更低。在本领域里，选择具体的金属组分以及维氏硬度，是普通技术人员的基本技能，在引用的权利要求没有新颖性的前提下，权利要求 3、4 不具有专利法第二十二条第三款规定的创造性。

从属权利要求 5 进一步限定的技术特征是，细金属粉末至少含有下列一种金属组分：锡、锌、铅、镉、铟、金、银和铝；从属权利要求 6 进一步限定的技术特征是，细金属粉末是细铝粉末；从属权利要求 7 进一步限定的技术特征是，稀土金属基永磁体是稀土-铁-硼。对比文件 1 公开了细金属粉末为铝以及粘结磁体为 Nd-Fe-B，在引用的权利要求没有新颖性的前提下，权利要求 5-7 不具有专利法第二十二条第二款规定的新颖性。

从属权利要求 8 进一步限定的技术特征是，稀土金属基永磁体是粘结磁体，磁体表面上的树脂部分被薄膜层所覆盖，薄膜层由至少含有下列一种金属组分的细金属粉末所组成：铜、铁、镍、钴、铬。对比文件 1 公开了 Nd-Fe-B 型粘结磁体表面的树脂部分被镍薄膜层所覆盖，在引用的权利要求没有新颖性的前提下，权利要求 8 不具有专利法第二十二条第二款规定的新颖性。

从属权利要求 9 进一步限定的技术特征是，稀土金属基永磁体是粘结磁体，磁体表面上的树脂部分被薄膜层所覆盖，薄膜层由维氏硬度为 60 或更低的细金属粉末构成。对比文件 1 公开了 Nd-Fe-B 型粘结磁体表面的树脂部分被金属薄膜层所覆盖，而选择维氏硬度是本领域技术人员的基本技能，在引用的权利要求没有创造性的前提下，权利要求 9 不具有专利法第二十二条第三款规定的创造性。

从属权利要求 10-12 进一步限定的是薄膜层的厚度、金属粉末颗粒的长径，选择这些参数，都是本领域技术人员的基本技能，在引用的权利要求没有新颖性和/或创造性的前提下，权利要求 10-12 不具有专利法第二十二条第三款规定的创造性。

独立权利要求 13 请求保护的是一种生产稀土金属基永磁体的工艺，对比文件 1 (JP11-3811A) (参见说明书全文，特别是第 2 栏第 29 行-第 6 栏第 30 行，附图 2、3) 公开了一种生产稀土永磁体的工艺，该永磁体为 Nd-Fe-B 类粘结磁体，将磁体和细金

属粉末材料放入处理容器中，进行搅拌，在磁体表面上形成由细金属粉末形成的薄膜层。权利要求 13 与对比文件 1 的技术领域相同，所要解决的技术问题相同，技术方案实质相同，预期效果也相同。因此，相对于对比文件 1，权利要求 13 不具有专利法第二十二条第二款规定的新颖性。

从属权利要求 14 进一步限定的技术特征是，处理容器是滚筒式研磨机，对比文件 1 公开了这一技术特征，在引用的权利要求没有新颖性的前提下，权利要求 14 不具有专利法第二十二条第二款规定的新颖性。

独立权利要求 17 请求保护的是一种具有薄膜层的稀土金属基永磁体，对比文件 1 (JP11-3811A) (参见说明书全文，特别是第 2 栏第 29 行-第 6 栏第 30 行，附图 2、3) 公开了一种具有薄膜层的稀土类粘结磁体，该永磁体为 Nd-Fe-B 类粘结磁体，将磁体和细金属粉末材料放入处理容器中，进行搅拌，在磁体表面上形成由细金属粉末形成的薄膜层。权利要求 17 与对比文件 1 的技术领域相同，所要解决的技术问题相同，技术方案实质相同，预期效果也相同。因此，相对于对比文件 1，权利要求 17 不具有专利法第二十二条第二款规定的新颖性。

从属权利要求 18 进一步限定的技术特征是，永磁体的表面有一电镀膜，对比文件 1 公开了这一技术特征，在引用的权利要求没有新颖性的前提下，权利要求 18 不具有专利法第二十二条第二款规定的新颖性。

从属权利要求 19、20 进一步限定的技术特征分别是，永磁体的表面有一金属氧化物膜或化学转化涂层，永磁体的表面具有金属氧化物膜或化学转化涂层，是本领域的普通常识，在引用的权利要求没有新颖性的前提下，权利要求 19、20 不具有专利法第二十二条第三款规定的创造性。

3、其它缺陷

从属权利要求 18-20 直接从属于独立权利要求 1 部分，没有写在独立权利要求 1 之后，另外的独立权利要求之前，不符合专利法实施细则第二十三条第二款的有关规定。

说明书没有采用分五个部分，各部分加标题的方式进行撰写，不符合专利法实施细则第十八条第二款的有关规定。

说明书表 1、3、4、6、7 中的计量单位词头“K”应当是“k”，国家法定计量单位规定，表示“千”的字头为 k (英文小写)，不是 K (英文大写)。说明书用词不规范，

不符合专利法实施细则第十八条第三款的有关规定。

本申请与对比文件 1 的差别在于：形成本发明的薄膜层的金属粉末，是由线切割制得的柱状金属材料，经与磁体一起在研磨机进行研磨而得到的，柱状金属材料的直径为 1-2mm，长度为 0.8-1.5mm。而形成对比文件 1 的薄膜层的金属粉末是形成了溶液。申请人应当将这一区别特征，加到方法权利要求中，即加到权利要求 13 中，并将其它不清楚之处修改清楚，还应当使独立权利要求得到说明书的实质性支持，形成一个完整的技术方案，就是说，修改后的方法权利要求中应当包括，线切割柱状金属材料，形成直径为 1-2mm，长度为 0.8-1.5mm 的柱状金属材料，柱状金属材料与磁体一起在研磨机进行研磨，通过研磨产生具有新鲜表面的细金属粉末。同时删除产品权利要求，即权利要求 1-12 和权利要求 17-20。

另外，对比文件 2 (US5302464A) (参见说明书全文，特别是第 3 栏第 61 行-第 4 栏第 23 行) 也影响权利要求 1-20 的新颖性和/或创造性。

申请人有疑义，可拨打审查员的电话：82755272。

基于上述理由，本申请不能授予专利权，如果申请人不能在本通知书指定的四个月答复期限内对本通知书所指出的缺陷充分陈述理由或修改以克服缺陷，根据专利法实施细则第五十三条的有关规定，依照专利法第三十八条的规定，将驳回本申请。

**THE STATE INTELLECTUAL PROPERTY OFFICE OF
THE PEOPLE'S REPUBLIC OF CHINA**

CCPIT Patent and Trademark Law Office
8th Floor, 2 Fuchengmenwai Street,
Beijing 100037, China

HAN WEIZHI
Examiner

Seal of the
Examination
Department

Application No.:	00106723.0	Examination Dept.	9	Date of Notification: Date: <u>17</u> Month: <u>1</u> Year: <u>2003</u>
Attorney:	<i>Shengyou Cai</i>			
Applicant:	SUMITOMO SPECIAL METALS CO., LTD.			
Title of the Invention:	RARE EARTH METAL-BASED PERMANENT MAGNET, AND PROCESS FOR PRODUCING THE SAME			

Notification of the First Office Action

1. ☒ The applicant requested examination as to substance on Dec. 3, 2001 and examination has been carried out on the above-identified patent application for invention under Article 35(1) of the Patent Law of the People's Republic of China(hereinafter referred to as "the Patent Law").
☐ The Chinese Patent Office has decided to examine the application on its own initiative under Article 35(2) of the Patent Law.
2. ☒ The applicant claimed priority/priorities based on the application(s):
filed in JP on Jan. 27, 1999, filed in JP on Apr. 23, 1999,
filed in JP on Apr. 23, 1999, filed in JP on Jan. 11, 1999,
filed in _____ on _____, filed in _____ on _____,
☒ The applicant has provided the priority documents certified by the Patent Office where the priority application(s) was/were filed.
☐ The applicant has not provided the priority documents certified by the Patent Office where the priority application(s) was/were filed and therefore the priority claim(s) is/are deemed not to have been made under Article 30 of the Patent Law.
☐ The application is a PCT continuation.
3. ☐ The applicant submitted amendments to the application on _____ and on _____, wherein the amended _____ submitted on _____ and the amended _____ submitted on _____ are not acceptable, because said amendments do not comply with ☐Article 33 of the Patent Law.
☐Rule 51 of the Implementing Regulations of the Patent Law.
The specific reasons why the amendments are not allowable are set forth in the text portion of this Notification.
4. ☒ Examination as to substance was directed to the initial application documents as filed.
☐ Examination as to substance was directed to the documents as specified below:
claims _____, pages _____ of the description and drawings _____ filed on the date of filing,
claims _____, pages _____ of the description and drawings _____ submitted on _____,
claims _____, pages _____ of the description and drawings _____ submitted on _____,
and the abstract submitted on _____.
5. ☐ This Notification is issued without search reports.
☒ This Notification is issued with consideration of the search results.

- ☒ Below is/are the reference document(s) cited in this Office Action(the reference number(s) will be used throughout the examination procedure):

No.	Number(s) or Title(s) of Reference(s)	Date of Publication (or the filing date of conflicting application)
1	JP11-3811A	Date: <u>6</u> Month: <u>1</u> Year: <u>1999</u>
2	US5302464A	Date: <u>12</u> Month: <u>4</u> Year: <u>1994</u>
3		Date: __ Month: __ Year: ____
4		Date: __ Month: __ Year: ____

6. Conclusions of the Action:

☒ On the Specification:

- ☐ The subject matter contained in the application is not patentable under Article 5 of the Patent Law.
☐ The description does not comply with Article 26 paragraph 3 of the Patent Law.
☒ The draft of the description does not comply with Rule 18 of the Implementing Regulations.

☒ On the Claims:

- ☐ Claim(s) _____ is/are not patentable under Article 25 of the Patent Law.
☐ Claim(s) _____ does/do not comply with the definition of inventions prescribed by Rule 2 paragraph 1 of the Implementing Regulations.
☒ Claim(s) 1,2,5-8,13,14,17,18 does/do not possess the novelty as required by Article 22 paragraph 2 of the Patent Law.
☒ Claim(s) 3,4,9-12,19,20 does/do not possess the inventiveness as required by Article 22 paragraph 3 of the Patent Law.
☐ Claim(s) _____ does/do not possess the practical applicability as required by Article 22 paragraph 4 of the Patent Law.
☐ Claim(s) _____ does/do not comply with Article 26 paragraph 4 of the Patent Law.
☐ Claim(s) _____ does/do not comply with Article 31 paragraph 1 of the Patent Law.
☒ Claim(s) 1-3,8,9,13,16-20 does/do not comply with the provisions of Rules 20-23 of the Implementing Regulations.
☐ Claim(s) _____ does/do not comply with Article 9 of the Patent Law.
☐ Claim(s) _____ does/do not comply with the provisions of Rule 12 paragraph 1 of the Implementing Regulations.

7. In view of the conclusions set forth above, the Examiner is of the opinion that:

- ☐ The applicant should make amendments as directed in the text portion of the Notification.
☒ The applicant should expound in the response reasons why the application is patentable and make amendments to the application where there are deficiencies as pointed out in the text portion of the Notification, otherwise, the application will not be allowed.
☐ The application contains no allowable invention, and therefore, if the applicant fails to submit sufficient reasons to prove that the application does have merits, it will be rejected.
☐

8. The followings should be taken into consideration by the applicant in making the response:

- (1) Under Article 37 of the Patent Law, the applicant should respond to the office action within 4 months counting from the date of receipt of the Notification. If, without any justified reason, the time limit is not met, the application shall be deemed to have been withdrawn.
- (2) Any amendments to the application should be in conformity with the provisions of Article 33 of the Patent Law. Substitution pages should be in duplicate and the format of the substitution should be in conformity with the relevant provision contained in "The Examination Guidelines".
- (3) The response to the Notification and/or revision of the application should be mailed to or handed over to the "Reception Division" of the Patent Office, and documents not mailed or handed over to the Reception Divisions have no legal effect.
- (4) Without an appointment, the applicant and/or his agent shall not interview with the Examiner in the Patent Office.

9. This Notification contains a text portion of 6 pages and the following attachments:

- ☒ 2 cited reference(s), totaling 25 pages. ☐

Text Portion of the Notification of the First Office Action

The present application (Application No. 00106723.0) relates to a rare earth metal-based permanent magnet, and the process for producing the same. Upon the request of the applicant, the examiner proceeds to examine the application as to its substance and the comments are as follows:

1. Claims 1-3, 8, 9, 13, 16, 17 are not clear.

(1) Independent claim 1 seeks to protect a rare earth metal-based permanent magnet having a film layer. Said claim is unclear. The wording of "substantially" is ambiguous. The man skilled in the art can not clearly understand the expression of "made substantially of only a fine metal powder directly on a metal forming the surface of the magnet". Thus, claim 1 is not clear.

(2) Dependent claims 2 and 3 both contain parentheses having an explaining effect, such as the term of "copper (Cu)", which makes the claims unclear.

(3) The expression of "the resinous portion of the surface of said magnet" in dependent claims 8 and 9 is not contained in the claims to which claims 8 and 9 referred. Thus, said claims are unclear.

(4) In dependent claim 16, the expression of "fine metal powder producing material is of a needle-like shape and/or a columnar shape having a longer diameter in a range of 0.05 mm to 10 mm" is unclear, as a columnar body should not have a longer diameter. Thus, said claim is unclear.

Claims 1-3, 8, 9, 13, 16, 17 do not clearly define the protection scopes and are not in conformity with Rule 20(1) of the Implementing Regulations of the Patent Law.

2. Claims 1-20 lack novelty and/or inventiveness

In addition to above comments on the unclearness of the Claims, even though the applicant amended the Claims to be clear, the claims still lack novelty and/or inventiveness.

Independent claim 1 seeks to protect a rare earth metal-based permanent magnet having a film layer. Reference document 1 (JP11-3811A) (D1, see all the description, especially for column 2 line 29 – column 6 line 30 and Fig. 2 and 3 thereof) discloses a rare earth type bonded magnet having a film layer, in which the film layer of said magnet comprises only of metal powder adhering to the surface of the bonded magnet, and forms a coating on the surface of the film layer of the metal powder. It appears that claim 1 and D1 belong to the same technical field, share the same technical problems to be solved and the substantially the same of the technical solutions, as well as the same effects. Therefore, in view of D1, claim 1 lacks novelty as required by Article 22(2) of the Patent Law.

Dependent claim 2 further defines the technical feature that the fine metal powder contains at least one metal components selected from copper, iron, cobalt, nickel and chromium. D1 discloses that the fine metal powder is nickel. As the claim to which claim 2 refers lacks novelty, claim 2 lacks novelty as required by Article 22(2) of the Patent Law.

Dependent claim 3 further defines the technical feature that the fine metal powder is a fine copper powder. Dependent claim 4 further defines the technical feature that the fine metal powder has a Vickers hardness value of 60 or less. For those skilled in the art, the selection of the specific metal components and the Vickers hardness is a basic skill. As the claims to which claims 3 and 4 refer to lack novelty, claims 3 and 4 lack inventiveness as required by Article 22(3) of the Patent Law.

Dependent claim 5 further defines the technical feature that the fine metal powder contains at least one metal component selected from Sn, Zn, Pb, Cd, In, Au, Ag and Al.

Dependent claim 6 further defines the technical feature that the fine metal powder is a fine alumina powder. Dependent claim 7 further defines the technical feature that the rare earth metal-based permanent magnet is an R-Fe-B based permanent magnet. D1 discloses that the fine metal powder is alumina, and bonded permanent magnet is Nd-Fe-B. As the claims to which claims 5-7 refer to lack novelty, claims 5-7 lack novelty as required by Article 22(2) of the Patent Law.

Dependent claim 8 further defines the technical feature that the rare earth metal-based permanent magnet is a bonded magnet, and the resinous portion of the surface of said magnet is coated with a film layer of a fine metal powder which contains at least one metal component selected from Cu, Fe, Ni, Co and Cr. D1 discloses that the resinous portion of the surface of Nd-Fe-B type bonded magnet is coated with film layer of nickel. As the claim to which claim 8 refers lack novelty, claim 8 lacks novelty as required by Article 22(2) of the Patent Law.

Dependent claim 9 further defines the technical feature that the rare earth metal-based permanent magnet is a bonded magnet, and the resinous portion of the surface of said magnet is coated with a film layer made of a fine metal powder having a Vickers hardness value of 60 or less. D1 discloses that the resinous portion of the surface of Nd-Fe-B type bonded magnet is coated with film layer of metal. For those skilled in the art, the selection of the Vickers hardness is a basic skill. As the claim to which claim 9 refers lack inventiveness, claim 9 lacks inventiveness as required by Article 22(3) of the Patent Law.

Dependent claims 10-12 further defines the thickness of the film layer and the longer diameter of the metal powder. The selection of the above parameters is a basic skill for those skilled in the art. As the claims to which claims 10-12 refer lack novelty and/or inventiveness, claim 9 lacks inventiveness as required by Article 22(3) of the Patent Law.

Independent claim 13 seeks to protect a process for producing a rare earth metal-based permanent magnet. D1 (JP11-3811A)(see all the description, especially for the column 2

line 29 – column 6 line 30 and Fig. 2 and 3 in D1) disclose a process for producing a rare earth metal-based permanent magnet. Said permanent magnet is an Nd-Fe-B type bonded magnet. The magnet and the fine metal powder material are placed into a treating vessel, and vibrated, thereby, on the surface of the magnet, forming a film layer made of a fine metal powder. It appears that claim 13 and D1 belong to the same technical field, share the same technical problems to be solved and the substantially the same of the technical solutions, as well as the same effects. Therefore, in view of D1, claim 13 lacks novelty as required by Article 22(2) of the Patent Law.

Dependent claim 14 further defines the technical feature that the treating vessel is a treating vessel in a barrel finishing machine. D1 discloses said technical feature. As the claim to which claim 14 refers lacks novelty, claim 14 lacks novelty as required by Article 22(2) of the Patent Law.

Independent claim 17 seeks to protect a rare earth-based permanent magnet having a film layer. D1 (JP11-3811A, see all the description, especially for the column 2 line 29 – column 6 line 30 and Fig. 2 and 3 in D1) disclose a process for producing a rare earth metal-based permanent magnet. Said permanent magnet is an Nd-Fe-B type bonded magnet. The magnet and the fine metal powder are placed into a treating vessel, and then vibrated, thereby forming, on the surface of the magnet, a film layer made of a fine metal powder. It appears that claim 17 and D1 belong to the same technical field, share the same technical problems to be solved and the substantially the same of the technical solutions, as well as the same effects. Therefore, in view of D1, claim 17 lacks novelty as required by Article 22(2) of the Patent Law.

Dependent claim 18 further defines the technical feature that the permanent magnet has a metal plated film on its surface. D1 discloses said technical feature. As the claim to which claim 18 refers lack novelty, claim 18 lacks inventiveness as required by Article 22(3) of the Patent Law.

Dependent claims 19 and 20 further define the technical feature that the permanent magnet has a metal oxide film or a chemical conversion coating film on its surface. It belongs to know knowledge to a skilled person in the art that a permanent magnet can have a metal oxide film or a chemical conversion coating film on its surface. As the claims to which claims 19 and 20 refer lack novelty, claims 19 and 20 lack inventiveness as required by Article 22(3) of the Patent Law.

3. Other defects

Dependent claims 18-20 are dependent from independent claim 1, while these claims do not directly follow independent claim 1 and precede other independent claims. Therefore, claims 18-20 are not in conformity with Rule 23(2) of the Implementing Regulations of the Patent Law.

The description does not meet the requirement of Rule 18(2) for lack of subtitles.

The difference between the present application and D1 resides in that: the metal powder forming the film layer in the present invention is produced by finishing a columnar metal material obtained by cutting a wire with the magnet in the finishing machine. The diameter of the columnar material is 1-2 mm with a length of 0.8-1.5 mm; while in D1, the metal powder forming the film layer is in form of solution. The applicant should incorporate the abovementioned differentiate feature into the method claim, i.e. claim 13, and correct the unclearness in the claims. In addition, the independent claims should be substantially supported by the description, so as to make each claim outline the solution of the invention. That is to say, the method claims are to be amended to contain the following features: cutting a wire to form a columnar metal material having a diameter of 1-2 mm and a length of 0.8-1.5 mm; the columnar metal material is finished with the magnet in a finishing machine whereby forming fine metal powder with fresh surface. Meanwhile, the applicant should delete the product related claims, i.e. claims 1-12 and claims 17-20.

Furthermore, reference document 2 (US5302464A) (see all the description, especially for

column 3 line 61 - column 4 line 23) also affects the novelty and/or inventiveness of claims 1-20.

The applicant, if comes across any question, can phone the examiner at the number: 82755272.

Based on the above reasons, the present application can not be allowed at present. In accordance with Rule(53) of the Implementing Regulations of the Patent Law and Article(38) of the Patent Law, unless the applicant, within the time limit of four months set by this Notification, submits sufficient reasons on said defects or makes mendments to over come the defects, the present application will be rejected.